Amendments to the Claims

Please amend the claims as instructed in the marked-up version of the Listing of Claims presented below. This Listing of Claims replaces all prior versions, and listing of the claims in the application.

Listing of Claims

1-22. (Cancelled)

23. (Original) A battery pack comprising:

a housing;

a cell having a voltage, power being transferable between the cell and the electrical device;

a controller operable to control a function of the battery pack, the controller being operable with a voltage at least one of equal to and greater than an operating voltage threshold, the cell being operable to selectively supply voltage to the controller; and

a circuit operable to enable the controller to operate when the voltage supplied by the cell is below the operating voltage threshold.

24. (Original) The battery pack as set forth in Claim 23 wherein the circuit is operable to supply voltage to the controller such that the voltage supplied to the controller is at least one of equal to and greater than an operating voltage threshold.

25. (Original) The battery pack as set forth in Claim 24 wherein the circuit includes a boost circuit operable to boost the voltage supplied by the cell to at least one of equal to and greater than an operating voltage threshold.

26. (Original) The battery pack as set forth in Claim 24 wherein the circuit includes a power source operable to supply voltage to the controller such that the voltage supplied to the controller is at least one of equal to and greater than an operating voltage threshold, the power source not being operable to supply power to the electrical device.

27. (Original) The battery pack as set forth in Claim 26 wherein the power source includes a power component operable to supply voltage to the controller such that the voltage supplied to the controller is at least one of equal to and greater than an operating voltage threshold.

28. (Original) The battery pack as set forth in Claim 27 wherein the power component includes a capacitor operable to supply voltage to the controller such that the voltage supplied to the controller is at least one of equal to and greater than an operating voltage threshold.

29. (Original) The battery pack as set forth in Claim 27 wherein the power component includes a battery cell operable to supply voltage to the controller such that the voltage supplied to the controller is at least one of equal to and greater than an operating voltage threshold.

30. (Original) The battery pack as set forth in Claim 23 wherein the circuit includes a switch operable to selectively interrupt the transfer of power between the cell and the electrical device, the controller being operable to control the switch such that the voltage supplied by the cell to the controller is at least one of equal to and greater than an operating voltage threshold.

31. (Original) The battery pack as set forth in Claim 30 wherein the switch includes a FET, the controller being operable to control the FET such that the voltage supplied by the cell to the controller is at least one of equal to and greater than an operating voltage threshold.

32. (Original) The battery pack as set forth in Claim 23 wherein the cell is operable to supply power to the electrical device to operate the electrical device.

33. (Original) The battery pack as set forth in Claim 32 wherein said battery pack is a power tool battery pack, wherein the electrical device is a power tool, and wherein the cell is operable to supply power to the power tool to operate the power tool.

34. (Original) The battery pack as set forth in Claim 32 wherein, when the cell is at a low temperature, the supply of power to the electrical device causes the voltage supplied by the cell to the controller to be below the operating voltage threshold.

35. (Original) The battery pack as set forth in Claim 34 wherein, when the cell is at a higher temperature, the supply of power to the electrical device does not cause the voltage supplied by the cell to the controller to be below the operating voltage threshold.

36. (Original) The battery pack as set forth in Claim 32 wherein, when an ambient temperature is a low temperature, the supply of power to the electrical device causes the voltage supplied by the cell to the controller to be below the operating voltage threshold.

37. (Original) The battery pack as set forth in Claim 36 wherein, when the ambient temperature is at a higher temperature, the supply of power to the electrical device does not cause the voltage supplied by the cell to the controller to be below the operating voltage threshold.

38. (Original) The battery pack as set forth in Claim 32 wherein a load on the electrical device causes the voltage supplied by the cell to the controller to be below the operating voltage threshold.

39. (Original) The battery pack as set forth in Claim 32 wherein the operating voltage threshold is about 5 volts.

40. (Original) The battery pack as set forth in Claim 32 wherein the operating voltage threshold is about 3 volts.

41. (Original) The battery pack as set forth in Claim 33 wherein the function includes interrupting the transfer of power between the cell and the electrical device.

42. (Original) The battery pack as set forth in Claim 41 wherein the cell is operable to supply power to the electrical device to operate the electrical device, and wherein the function includes interrupting the supply of power from the cell to the electrical device.

43. (Original) The battery pack as set forth in Claim 41 wherein the electrical device is a power tool, and wherein the function includes interrupting the supply of power from the cell to the power tool.

44-93. (Cancelled)

94. (Original) A method of conducting an operation including a battery, the battery including a cell having a voltage, power being transferable between the cell and the electrical device, a controller operable to control a function of the battery pack, the controller being operable with a voltage at least one of equal to and greater than an operating voltage threshold, the cell being operable to selectively supply voltage to the controller, said method comprising the act of enabling the controller to operate when the voltage supplied by the cell is below the operating voltage threshold.

95. (Original) The method as set forth in Claim 94 wherein the battery includes a circuit operable to supply voltage to the controller, and wherein the enabling act includes the act of, with the circuit, supplying a voltage to the controller such that the voltage supplied to the controller is at least one of equal to and greater than an operating voltage threshold.

96. (Original) The method as set forth in Claim 95 wherein the circuit includes a boost circuit operable to boost the voltage supplied by the cell, and wherein the supplying act includes boosting the voltage supplied to the controller by the cell to at least one of equal to and greater than an operating voltage threshold.

97. (Original) The method as set forth in Claim 95 wherein the circuit includes a power source operable to supply voltage to the controller, the power source not being operable to supply power to the electrical device, and wherein the supplying act includes the act of supplying voltage from the power source to the controller such that the voltage supplied to the controller is at least one of equal to and greater than an operating voltage threshold.

98. (Original) The method as set forth in Claim 97 wherein the power source includes a power component operable to supply voltage to the controller, and wherein the supplying act includes the act of supplying voltage from the power component to the controller such that the voltage supplied to the controller is at least one of equal to and greater than an operating voltage threshold.

99. (Original) The method as set forth in Claim 98 wherein the power component includes a capacitor operable to supply voltage to the controller, and wherein the supplying act includes the act of supplying voltage from the capacitor to the controller such that the voltage supplied to the controller is at least one of equal to and greater than an operating voltage threshold.

100. (Original) The method as set forth in Claim 98 wherein the power component includes a battery cell operable to supply voltage to the controller, and wherein the supplying act includes the act of supplying voltage from the battery cell to the controller such that the voltage supplied to the controller is at least one of equal to and greater than an operating voltage threshold.

101. (Original) The method as set forth in Claim 94 wherein the circuit includes a switch operable to selectively interrupt the transfer of power between the cell and the electrical device, and wherein the enabling act includes the act of controlling the switch such that the voltage supplied by the cell to the controller is at least one of equal to and greater than an operating voltage threshold.

102. (Original) The method as set forth in Claim 101 wherein the switch includes a FET, and wherein the enabling act includes the act of controlling the FET such that the voltage supplied by the cell to the controller is at least one of equal to and greater than an operating voltage threshold.

103. (Original) The method as set forth in Claim 94 and further comprising the act of supplying power from the cell to the electrical device to operate the electrical device.

104. (Original) The method as set forth in Claim 103 wherein said battery pack is a power tool battery pack, wherein the electrical device is a power tool, and wherein the supplying act includes the act of supplying power from the cell to the power tool to operate the power tool.

105. (Original) The method as set forth in Claim 94 and further comprising the act of, with the controller, interrupting the transfer of power between the cell and the electrical device.

106. (Original) The method as set forth in Claim 105 wherein the cell is operable to supply power to the electrical device to operate the electrical device, and wherein interrupting act includes the act of interrupting the supply of power from the cell to the electrical device.

107. (Original) The method as set forth in Claim 105 wherein the electrical device is a power tool, and wherein the interrupting act includes the act of interrupting the supply of power from the cell to the power tool.